Department of Public Health and Human Services
ENVIRONMENTAL LABORATORY
P.O. Box 4369, Helena, MT 59604 (406) 444-2642 / Toll Free (800) 821-7284

PRIVATE WELL TESTING - ORDER FORM

The results are suitable for general knowledge of the quality of your drinking water. Results are provided without QA/QC.
See Collection Instructions and test explanations on the last page.

TEST NAME – See back of page for explanation of tests		COST	Check here to Request
BASIC SCREEN **Coliform and E. coli bacteria** **Nitrate + nitrite** **Specific Conductivity**	- small 100-mL plastic bottle with tablet for coliform bacteria - one 250-mL plastic bottle for nitrate and conductivity **Please fill and return both bottles to the laboratory**.	**$40.00**	
METALS SCREEN **Calcium Sodium Copper** **Magnesium Iron Lead** **Hardness Manganese Arsenic**	- one 250-mL plastic bottle **or** one 1-liter plastic bottle	**$35.00**	
ANION SCREEN **Sulfate Alkalinity** **Chloride pH** **Fluoride**	-one 250-mL **or** one 1-liter plastic bottle	**$40.00**	
PETROLEUM SCREEN – Presence / Absence Volatile Organic Compounds (solvents, fuels, oils) Synthetic Organic Compounds	Must be collected in GLASS CONTAINERS obtained from the lab	**$50**	**Call for Bottles**
PESTICIDE / HERBICIDE SCREEN Presence / Absence of regulated compounds	Must be collected in GLASS CONTAINERS obtained from the lab	**$60**	**Call for Bottles**
FULL WELL SCREEN **all of the above Screens**	**all of the above Screens, at a $40.00 savings.**	**$185**	**Call for additional Bottles**

ALL INFORMATION MUST *BE COMPLETED FOR ANALYSIS*

COLLECT DATE: ___ / ___ / 2 0 ___ Account #: _____ (if known)

COLLECT TIME: ___ : ___ AM PM

COLLECT BY: _____

PHONE NO: (___) ___ - ___

Sampling Location: _____ **Sample Source:** Well Spring Other:_____
(Kitchen tap, well head, bathroom sink, etc.)

Samples MUST be PAID in ADVANCE. Please INCLUDE A CHECK for the correct amount payable to DPHHS Environmental Laboratory.

COMPLETED RESULTS TO BE SENT TO (Please PRINT one letter per box):

Name

Address

City State Zip

County

( ) - Phone

COPY of results sent to:

Name

Address

City State Zip

Lab #: _____

DPHHS ENVIRONMENTAL LABORATORY

LAB USE ONLY THIS PAGE

Date Rec'd: _____ Amount Rec'd: _____ **SAMPLE TYPE:** Water Soil Paint Fish Fuels Urine Other: _____

Time Rec'd: _____ Check #: _____ Sample pH: _____

Rec'd By: _____ Date Check Written: _____ Sample Temperature: _____

Sample Conductivity:_____ Checked by: _____

Sample Turbidity:_____

Number of Bottles Received:

BacT	Nutrients	Common Ions	Metals	Wet Chem	DW 508 DW 525	DW 515	VOC THM	DW 531	DW 552	WellPest WellPetro	WellHerb	

Holding times observed?	Y N
- Under 48 hours for IC?	Y N
Sample containers in acceptable condition?	Y N
Sufficient sample volume for all tests?	Y N
Chain of Custody Level:	1 2 3
- Chain of Custody intact?	Y N
VOC/THM zero headspace?	Y N

SPLITS: (mL)

Lachat: :	50	250
IC	50	250
Metals:	50	250
SPC	50	250
Commons	50	250

pH Check:	Preserved in?		Preserved with?
Metals:	L	F	HNO3
Nutrients:	L	F	H2SO4
Other:	L	F	

WELL SCREENS

BASIC
- TCPA / TCQT / TOTP
- SPC
- NO3NO2 / NO3
- DISCBASIC

WELLSCAN

ANION SCREEN
- SO4-IC
- CL-IC
- F-IC
- ALK
- pH
- DiscAnion

WELLHERB

WELLPETRO

WELLPEST
- DiscFull

Comments:

DPHHS ENVIRONMENTAL LABORATORY

EXPLANATION OF TESTS

BASIC SCREEN - Coliform bacteria are naturally present in the environment and are used as an indicator that other, possibly harmful, bacteria may also be present. **E. coli** bacteria is an indication of human or animal fecal contamination**. Nitrate + nitrite** can be naturally occurring, but often is associated with contamination from septic systems, animal corrals or feedlots, or runoff from fertilizers. **Specific conductivity** provides an estimate of the amount of minerals dissolved in the water – high conductivity indicates a large amount of dissolved minerals, which could adversely affect the quality of the water.

METALS SCREEN - includes calcium and magnesium, which contribute to hardness; sodium, which may be of interest to individuals on a sodium-restricted diet; zinc, iron, manganese, copper, and high-level lead and high-level arsenic. High metals concentration can affect the taste of water, may indicate a corrosion problem, or may lead to the clogging of pipes by hardness deposits. Iron concentrations above 0.3 mg/L (milligrams per liter or parts per million) may promote the growth of iron bacteria, which can produce a brown slime (often visible in the toilet tank) and an offensive odor. EPA has set drinking water limits for lead at 0.015 parts per million (ppm), and for arsenic at 0.010 ppm. The SCREEN test will detect lead to about 0.005 ppm and arsenic to about 0.005 ppm. Lead and arsenic can be analyzed by a more sensitive method in order to detect lower levels of the metals, for a cost of $21.00 each.)

ANION SCREEN – includes sulfate (can cause intestinal problems for those not accustomed to drinking water with high sulfate concentration), chloride (high levels can cause water to taste salty, and along with high hardness concentrations, may increase the likelihood of corrosion), fluoride (important for healthy teeth), alkalinity (buffering capacity of the water), and pH (and indication of how acidic or basic the water is)

PETROLEUM SCREEN – detects the presence or absence of hydrocarbons from fuels, oil and solvents in water; use this if you suspect a spill near your water source. Request bottles and collection instructions from the laboratory.

PESTICIDE / HERBICIDE SCREEN– detects the presence or absence of several common herbicides, pesticides and synthetic organic compounds in water. Request bottles and collection instructions from the laboratory.

FULL WELL SCREEN – all of the above Screens, at a $40.00 savings – **You must collect Petroleum and Pesticide Screen samples in amber bottles obtained from the lab. Please call for these bottles.**

Other Bacterial Tests Available for Well Water

IRON BACTERIA - iron levels above 0.3 mg/L may occasionally support the growth of iron bacteria, which may form a reddish brown or yellow slime that can clog plumbing. These bacteria may cause an odor similar to fuel oil or sewage, or occasionally a "rotten egg" odor. Iron bacteria do not cause health problems, but may make the water less palatable and cause plumbing problems.

SULFUR BACTERIA – may be found in conjunction with iron bacteria, and will impart a strong sulfur or "rotten egg" odor to the water.

Each type of bacteria may be tested in the Laboratory at $23.00 for iron bacteria and $23.00 for sulfur bacteria. Call the Lab or your local sanitarian's office for sampling containers.

PLEASE INCLUDE A CHECK FOR THE CORRECT AMOUNT WITH YOUR SAMPLES. SAMPLES WILL NOT BE ANALYZED UNLESS PAID FOR IN ADVANCE.

DPHHS ENVIRONMENTAL LABORATORY

COLLECTION INSTRUCTIONS

BASIC SCREEN (two bottles)
METALS SCREEN (one bottle)
ANION SCREEN (one bottle)

Basic Screen:
Bacteria Sample: 100-mL plastic bottle with a small white tablet or bit of white powder in it
Nitrate, Conductivity: 250-mL plastic bottle

Metal Screen: 250-mL or l Liter plastic bottle
Anion Screen: 250-mL or l Liter plastic bottle

Combination of Basic Screen and the Metal and/or Anion Screens:
Bacteria Sample: 100-mL plastic bottle with a small white tablet or bit of white powder in it
Other Screens: one 1-Liter plastic bottle

NOTE: Bacteria samples must reach the laboratory **within 30 hours of collection** time. Check your post office for the best mailing times. Keep the sample cool after collection; don't leave it in a hot vehicle.

1. Remove the screen from an indoor cold-water faucet
2. Clean the inside and outside of the faucet with a bleach solution or with alcohol
3. Run the water for 2-3 minutes to clean out the lines
4. Reduce the water flow to about pencil size
5. Carefully remove the top from the 100-mL bacteria collection bottle, making sure not to touch the inside of the cap or bottle
6. **Without rinsing the bottle**, fill it to the 100-mL mark; leave the white powder or pill in the bottle
7. Cap the bottle firmly, mark your name and the sample ID on the bottle with a waterproof pen
8. Fill the 250-mL bottle (or the 1-liter bottle) to the neck in the same manner; this bottle does not contain a pill or powder.
9. Fill out all the paperwork, include a check for the cost of samples and return the bottle to the lab in the envelope provided.

COLLECTION INSTRUCTIONS

PETROLEUM AND HERBICIDE/PESTICIDE SCREENS

This sampling kit includes amber quart sized jars, an amber ½ pint-sized jar, and 3 small glass vials in packing foam. Please follow the instructions below for collecting your sample.

1. Freeze the ice packs overnight before sampling. Make sure they freeze flat.
2. Glass amber bottles contain preservatives. **Do not rinse them out**.
3. Glass vials also contain preservatives; do not rinse them out.
4. Take samples from a cold water tap indoors (do not take samples from a hose.)
5. Remove the aerator, and allow the water to run for 3 to 4 minutes before sampling.
6. Fill the quart amber bottle full to the neck and cap tightly
7. Fill the small amber bottle (not the smaller vials) about 2/3 full and cap tightly
8. Fill the vials according to the following instructions:
   a. Fill the vials just to overflowing, being careful not to flush out the quick-dissolving preservative
   b. Fill the duplicate vial as above (a)
   c. Cap both bottles tightly, making sure the Teflon side of the cap liner faces toward the sample. Shake the samples vigorously for one minute. Invert the vials and observe if any air bubbles are trapped in it; bubbles will invalidate the sample. If you observe bubbles, uncap the vial and fill with a few more drops of water, cap and recheck for air bubbles until none are apparent.
9. Completely fill out the information sheet included with the kit.
10. Repack the cooler so that the bottles will not hit each other and break during transit. The ice packs work well as cushions.
11. Tape the cooler securely closed. You may use any carrier for delivery of the cooler to the lab: bus, UPS, Postal Service priority mail, Federal Express or hand delivery.